APPENDIX A

The following diagrams are figures 3-9 from Johnson's "Method and System for Consolidating and Distributing Information," annotated with explanatory text from the patent.

Figure 3 with Descriptions from Patent Page/ Line References

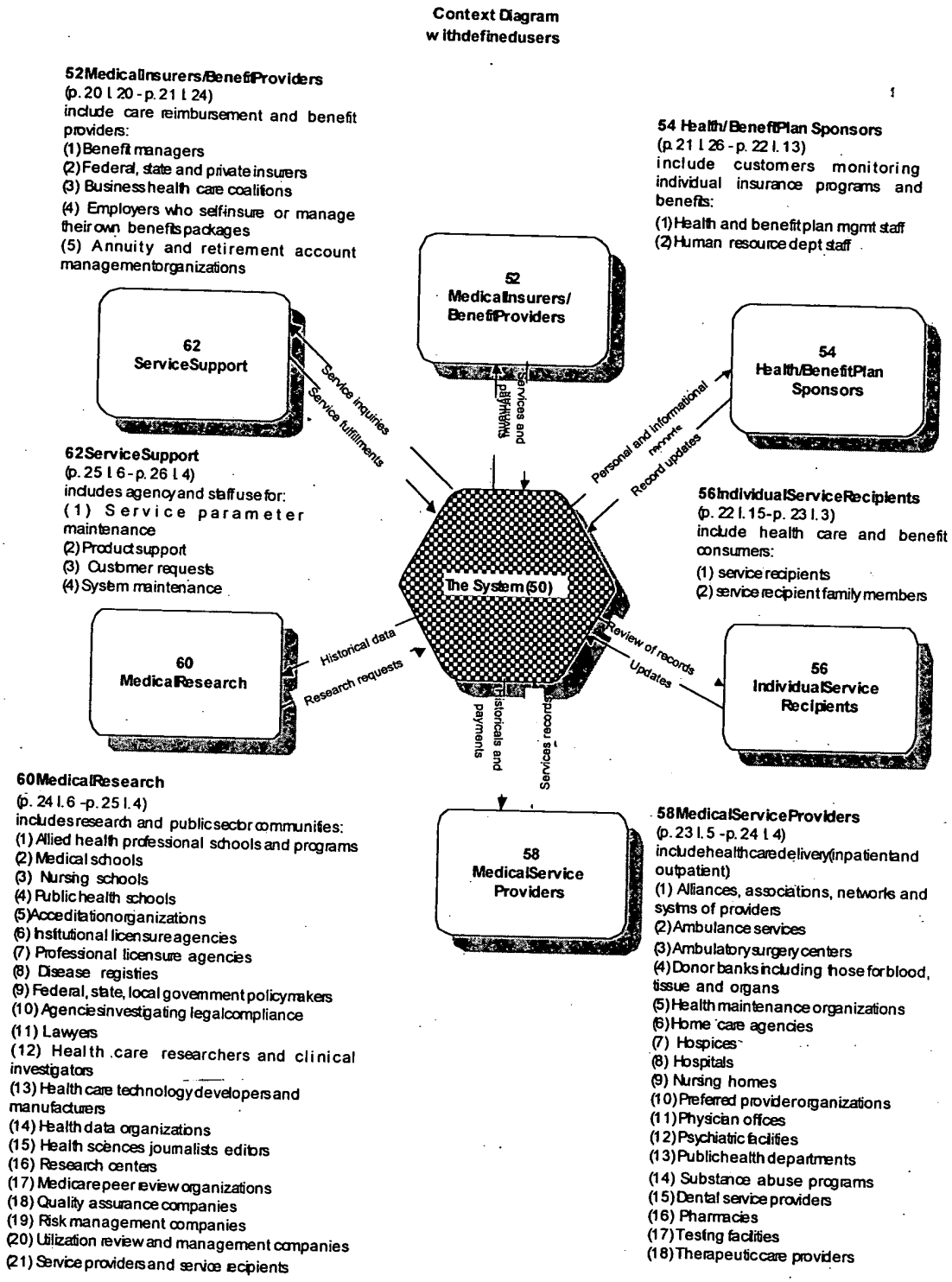
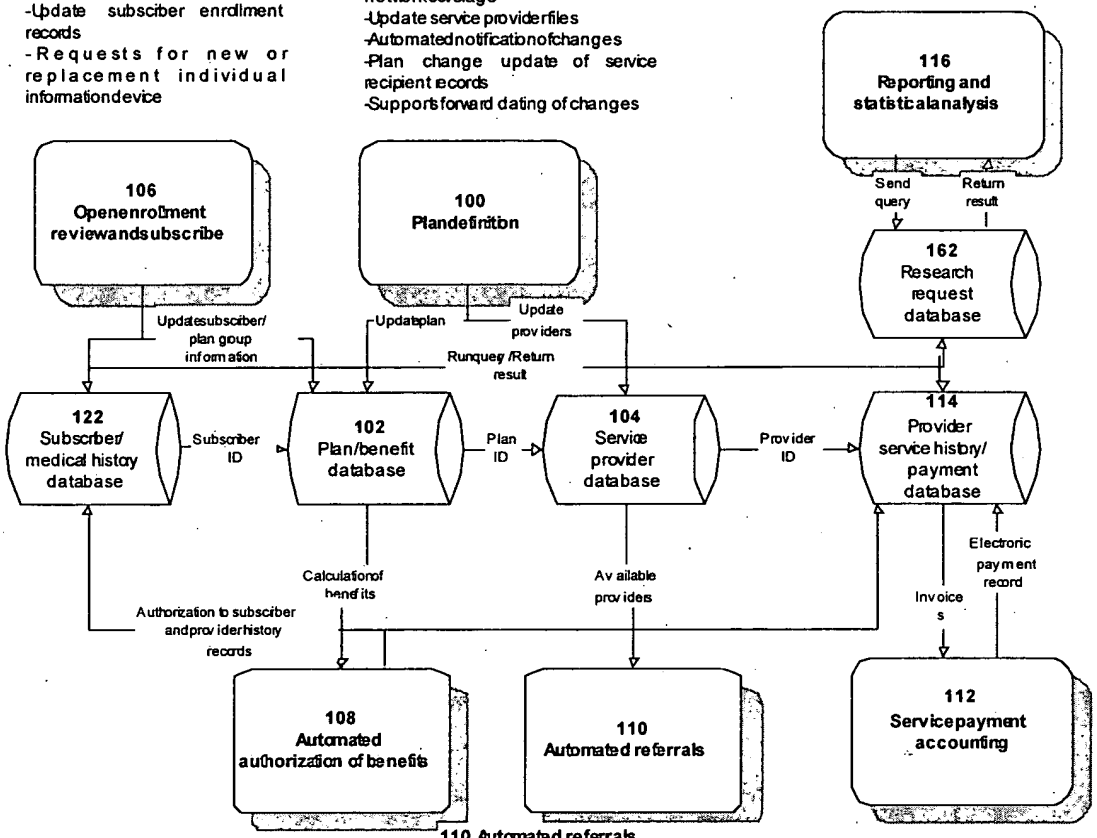


Figure 4 with Descriptions from Patent Page/ Line References

106 Open enrollment (p.26 l. 30-p. 28l.4)
-Download and changes for plan marketinginformation
-Marketing and enrollmentonline information and automated distribution to plan sponsors and theirservice recipients
-Plan sponsor and service recipient communication with plan sales and marketing staff
-Update plan sponsor information
-Update subscriber enrollment records
-Requests for new or replacement individual informationdevice

100Plandefinition (p.26 l. 9-28) :
-On-line review/ deletion/revision of existing plans and their coverage parameters
-Creation of new plans through setting newplan parameters
-Copy capabilitiesto simplify record changes
-Plan parameters include procedures, pharmaceuticals, providers, payment and reimbursement ceilings and out-of-networkcoverage
-Update service providerfiles
-Automatednotificationofchanges
-Plan change update of service recipient records
-Supportsforward dating of changes

116 Reporting and statistical analysis (p.30 l.21-p. 31 l. 25):
-Serviceprovidermonitoring
-Service dataforbenefitcalculations ;
-Organizational summaries for practice guidelinesand outcomes management
-Coststand outcomes of care
-Full service recipient care information for adjudication of claims and coverage decisions



108 Automated authorization of benefits (p. 28 l 6- 27)
-Authorizes service provider requests for service recipient procedures or medications
-Calculates payments for care involving one or more benefit provider and adds approval codes and payment amounts to the service provideauthorization record
-Authorizationrecord containsstandardized formats and codes
-Declined requestsresult in online decline message for manual review

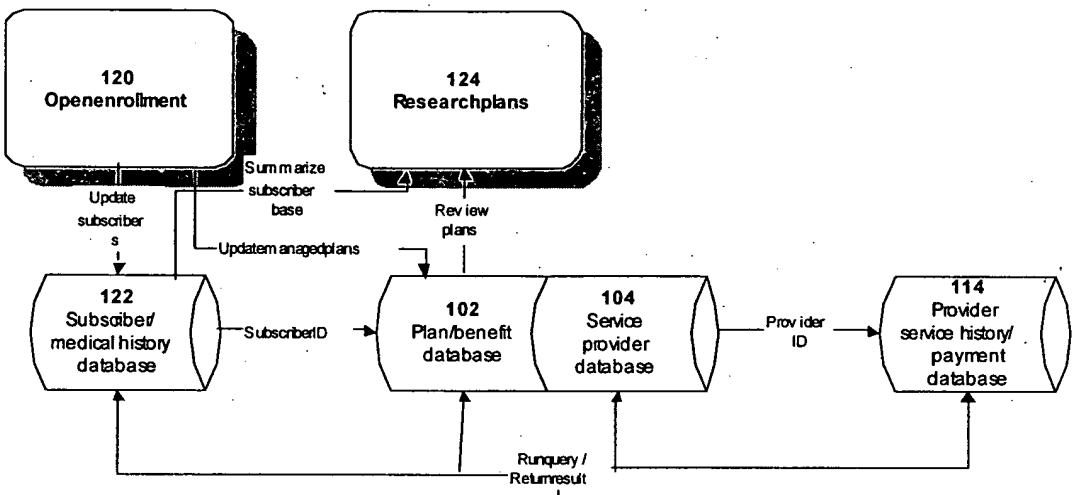
110 Automated referrals (p.28 l.29 - p.29 l.19):
-Identifies providers, hospitals and clinics that are in-plan or within a geographic or affiliation search, or can identify a specifc targeted referal provider
-Manages referrals for services, returning referral results for service providerselection of the desired referal provider
-Authorization approval isreturned to the service provider
-Message for appointment can be automatically constructed and transmitted to the referral service provider

112Service paymentaccounting (p.29 l.21- p. 30 l.19)
-Automated transmittal of service provider invoices
-. Electonic funds transfer for invoice paymentwith ability to identfyspecifc paymentaccounts and EFT parameters
-Payment history generated and appended to servicerecipient medical history ecord
-Foldering in operational batches aid handling
-Generates electronic and printed audit reports
-Produces exception handling messages

Figure 5 with Descriptions from Patent Page/ Line References

120 Openenrollment
(p. 32 l 2 -21)
-Modifications of benefit information to auxiliary reimbursement accounts, insurance, annuity, retirement or worker compensation plans can be made manually or electronically
-Modifications to health care plan participation records
-Production and distribution of new or replacement individual information devices made through electronic requests
-Deactivation of individual information devices transmitted electronically

124 Researchplans
(p. 32 l. 23 -p. 33 l. 17)
-Search for, review and compare available plans and request marketing information or respond to plan and coverage issues
-Communicate with a medical insurer/ benefit provider to apply for inclusion in a new plan
-When medical insurer/ benefit providers add or update plans, electronic notification is automatically sent to affected parties
-Electronic communication supports exception item processing and dispute resolution among medical insurers/ plan sponsors, service providers and service recipients

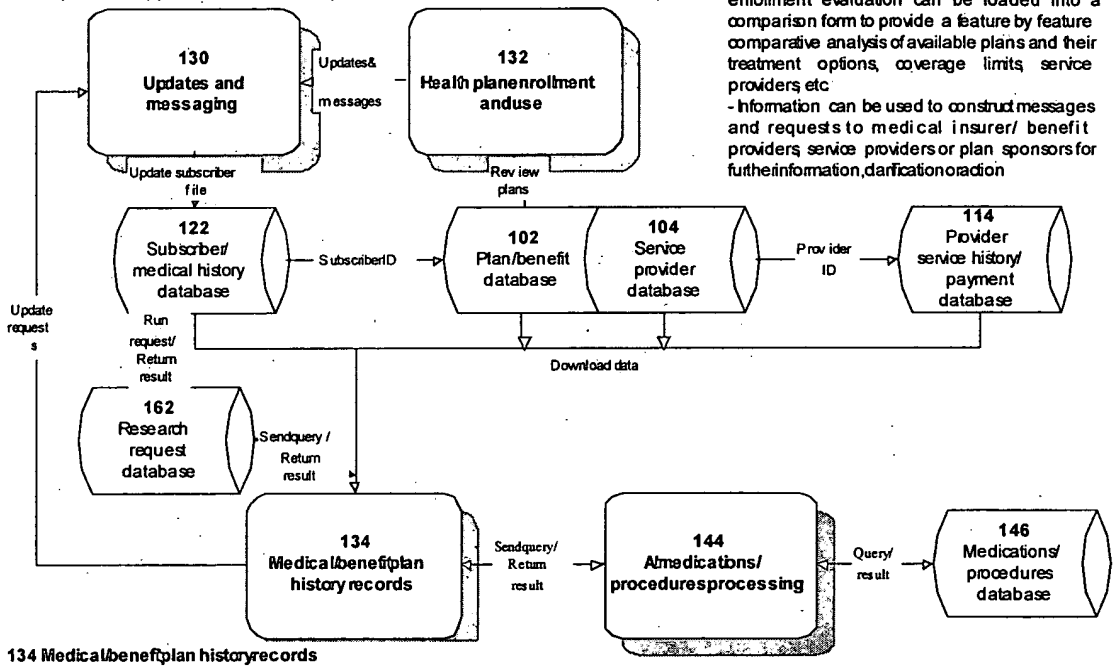


126 Benefit usage management
(p. 33 l. 19 - p. 34 l. 3)
-Provides information for managment of medical care reimbursement accounts, worker's compensation or other auxiliary plans
-Information to respond to queries on service participant benefit selection and usage, service audits and information for tax and reporting purposes
-Data queries can be specified as one-time only or can be requested on an ongoing basis for continuing efforts, such as electronic transmission of data to reimbursement plans

Figure 6 with Descriptions from Patent Page/ Line References

130 Updates and messaging
(p. 35 l. 11 - p. 36 l. 7)
-Communication with health care providers (including practitioners, insurers, sponsors, etc.)
- Research care options provided under the service recipient's health plan and access expert health care databases
- Electronic messages can be retrieved, previously requested files downloaded, available plans reviewed online and electronic messages sent
-Requests can be made for access to records from the central host databases
-Plan/ benefit information can include information about other types of benefit plans, including reimbursement accounts, insurance, annuity, retirement or worker compensation plans
- Use information to review plan information, treatment and payment histories, construct messages to plan sponsor for replacement of an individual information device or ask questions regarding plan options or usage
-Initiate changes in medical history record such as emergency, allergy, contact, identification or treatment preference options, notations on functional health status or errors found in the health care history record
- Send messages to providers regarding questions, treatment options or requests for appointments

132 Health plan enrollment and use
(p. 36 l. 9 - 23)
-Information on multiple plans for health plan enrollment evaluation can be loaded into a comparison form to provide a feature by feature comparative analysis of available plans and their treatment options, coverage limits, service providers, etc
- Information can be used to construct messages and requests to medical insurer/ benefit providers, service providers or plan sponsors for further information, clarification or action



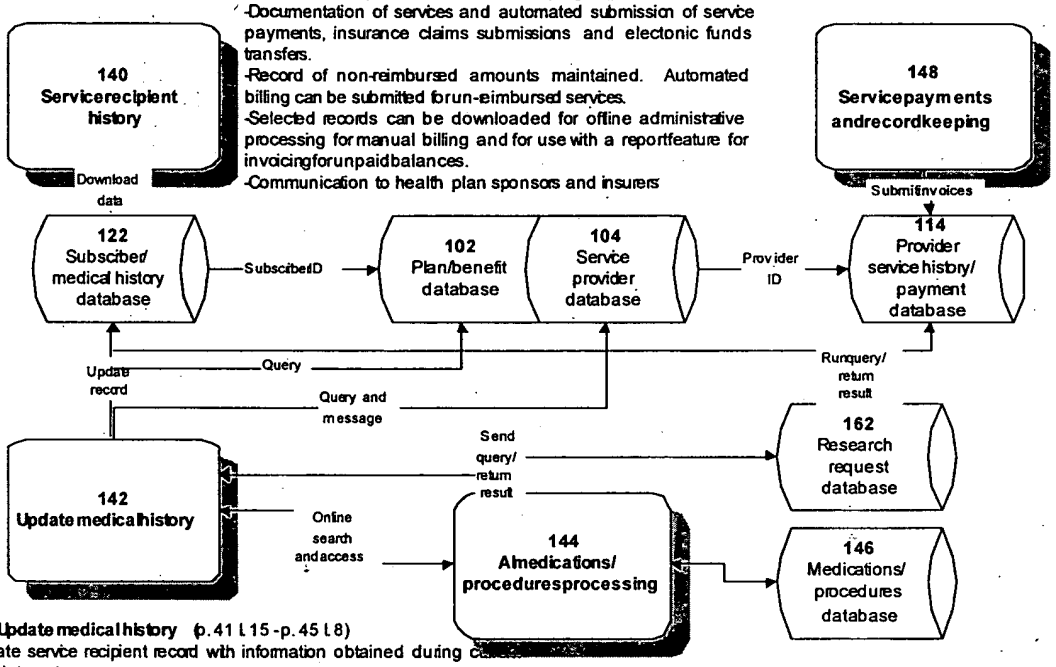
134 Medical/benefit plan history records
(p. 36 l. 25 - p. 28 l. 2)
-Access information pertaining to care of individual or family members
- Review of allergies and emergency information, health plan status, identification and emergency contact information, health care history and payments
-Format history record into a health care history and subscriber information record. The service recipient can "flip through" these records, allowing an audit of current services, diagnoses, procedures and medications, and payment histories. Messaging features are supported.
- Using the GUI, the service recipient selects a message option and identifies a selected plan sponsor and constructs a message (such as requesting replacement of individual information device, change personal records, or ask questions regarding plan options or usage and transmit message.
-Changes to the health care record or to correct errors found in an audit
- Construct message option for questions, appointment requests, queries regarding functional health status and results of administation of home tests. Information relating to the request and additional notes and comments can be appended to the communication
- A construct search option permits searches of system records
-Formatting option allows the use of health care information and payment records to construct printed reports, including IRS accountings of health care services and costs during a given tax year, listings for health care reimbursement plans, or general health care information records

144 Almedications/procedures
(p. 38 l. 4 - 18)
- Review queries on procedures, medications and other care components from constructed search from database on current treatments and medications including company names and costs
- Review descriptions of diseases and information regarding causes and preventative advice or health maintenance information
- Processes include database searching and messaging.

Figure 7 with Descripti ns fr m Patent Page/ Line References

140 Servicerecipienthistory (p. 38 l 25 -p. 41 l. 13)
-Reviewof health care historyrecords stored on the service recipient integrated circuit card and for full detailed record, on the subscriber/ medical historydatabase 122. Mobile unitscan accessemergency information stored on the individual information device.
-Download diagnostic codes allowsthe service provider to identifycategories for selection of codes during consultation. Codes and service recipient record can be transmited to a hand-held device orprinted foruse during consultation.
-Service recipient record loaded into software on service providercomputer formatted into problem-oriented, time-oriented orcustomized sceen format, which can be printed. Diagnostic, procedural and medication codesare shown with their definitions, as available through the central host. Codescan be downloaded at anytime and stored for furtheroffline use.
-All codes for medical plans/benefits can be shown with full textcode descriptions in the language specified bythe service provider.
-Service recipient records contains detailed health care history and dates, contact and identification, insurance, functional status, treatment preferences,comments and changes noted bypatient.
-Online help facility to aid provider through the process of accessing and loading information from any source and using diagnostic codes.
-Communication facilities with othersystem participants.
-Front-page problem list with index, problem-oriented medical record, standard and summary time-oriented record with current treatments and medications and testdates and results.
-Print detailed code sheet forexam (ordownload to handheld device)

148 Servicepayments andrecordkeeping (p. 48 l. 16 -p. 50 l. 7)
-Documentation of services and automated submission of service payments, insurance claims submissions and electonic funds transfers.
-Record of non-reimbursed amounts maintained. Automated billing can be submitted forun-eimbursed services.
-Selected records can be downloaded for offline administrative processing for manual billing and for use with a reportfeature for invoicingforunpaidbalances.
-Communication to health plan sponsors and insurers

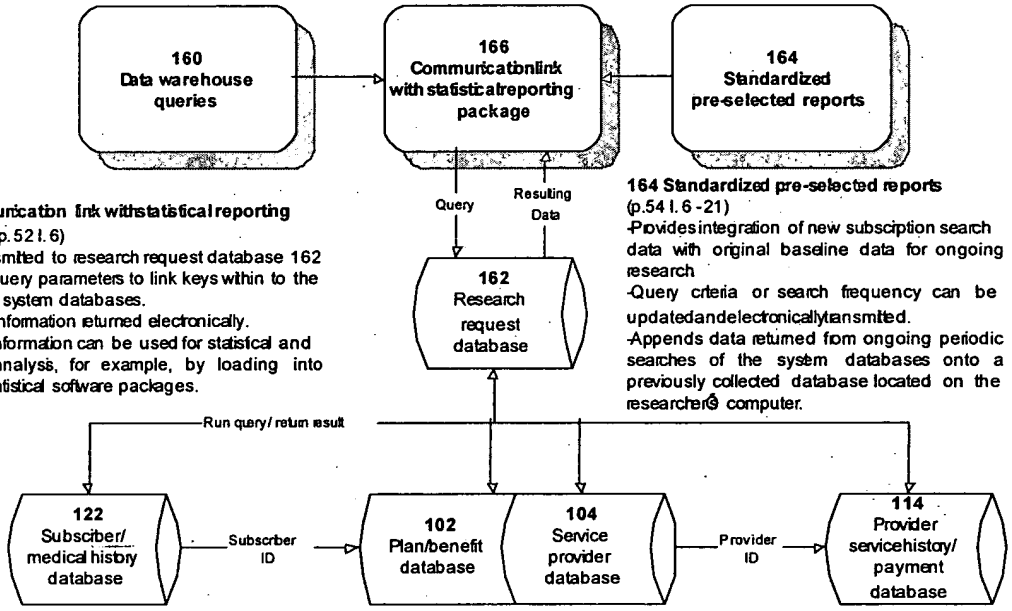


142 Update medical history (p. 41 l 15 -p. 45 l 8)
-Update service recipient record with information obtained during c... appointment.
-Test results can be loaded manually for electronically and can include electonicmonitoring devices.
-To review online diagnostic information through the Al Medications/ procedures functions, the service provider selects diagnostic assistance feature prompting for for codes and limitations. General searches can also be constructed.
-Can select procedural and/or medication codes to run a conflict search againstthe service recipient record and use result to constuct authorization request.
-Can construct a research request for outcomes research on diagnostic codes or to identify acare networkcontaining otherswith the same prognosis and to construct an authorization forservices orreferral.
-System identifies referral service providers available to recipient's plan. Provider can select provider and send message with record, authorization message and requestforappointment or otherinformation.
-Authorization requestsdecined due to plan parameters,message sent to insurer and provider for manual procedure for exceptions, appeals and questions.
-Negative resultsof conflictedits ignored by sevice provider is ecorded.
-Record can be used to print reports, authorizations, prescriptions, full histories, discharge summaries, insurance forms, school and camp forms, etc.

144 Almedications/procedures (p. 45 l 10 -p. 48 l 10)
-Online diagnosticfunctionsto assistthe service provider in determining whether a procedure or medication is effective and safe, costeffective and whether it provides the desired outcomes.
-Information summary is eturned where the provider can choose an item to see the record, images, video or other availablemultimedia.
-Provider can selectdiagnostic, treatment, procedure or medication codes,electonically add themto the patient's record and can run an alert check to identify elements causing atreatment conflict
-If altered care component is kept in patient record, an alert message is included in record and on any printed records including presciptions.
-Communication with other practitioners.
-Review patient's plan parameters.

Figure 8 with Descriptions from Patent Page/ Line References

160 Datawarehouse queries (p. 50 l. 9 - p. 55 l. 4)
-Data warehouse queries conducted using standardized definitions stored in data dictionary. Frequency of data search can be specified. Automated periodic data downloads available for long-term research. Changes made be made to existing periodic data subscriptions.
-Date of update of central data dictionary can be checked for currency.
-Researcher can construct query by selecting fields from the data dictionary of central datastores. Security rules control access.
-Data queries can be specified as one-time only or requested on an ongoing, time-specific basis for research.
-Reporting format may be defined; for example individual histories can be selected according to specific criteria.
-For confidentiality, data can be stripped of identifying information and searched, for example, by location or diagnostic codes.
-Information returned by search can be accessed by standard data analysis tools or customized models.
-Data can be provided for research, education and monitoring purposes.
-The researcher has flexibility in identifying the desired research database, which is selected from the full system databases. Therefore, the data elements and selected values to be extracted can exhibit wide variety and customization. Because of this, it also provides data access for regulatory purposes. This includes evidence for litigation, assessment of compliance with laws or standards of care, accreditation of care providers and organizations, and comparisons of health care organizations, professionals and procedures. For example, a regulatory agency could identify service providers engaged in fraudulent procedures.
-The query selection process permits access for new product development, clinical research, technology assessment, service recipient outcomes, identification of at risk populations, service recipient care effectiveness and treatment cost effectiveness, and the development of registies and databases.
-Appropriate searches can provide information to assist in policy development, such as resource allocation, workload assessment, risk assessment, stategic planning and public health monitoring, trend analysis, forecast development and cost management. Information can also be used for healthcare industry research and development, marketing stategy planning, case mix documentation, quality assurance planning and implementation, and cost management policy planning and implementation. Information may be supplied for institutional cost reporting, budgetary, productivity and quality assurance, for hospital accreditation, risk management and maket placement analysis, personnel recruitment, equipment acquistion and facilities development.
-Supports comparisons of local, state, national and international health data such as prognosis, treatment options and cost of care for use in regional, national and international heal objectives. Such information includes data on mortality, morbidity and disability, injuries, personal, environmental and occupational risk factors, preventative and treatment services, costs and actuarial analyses.



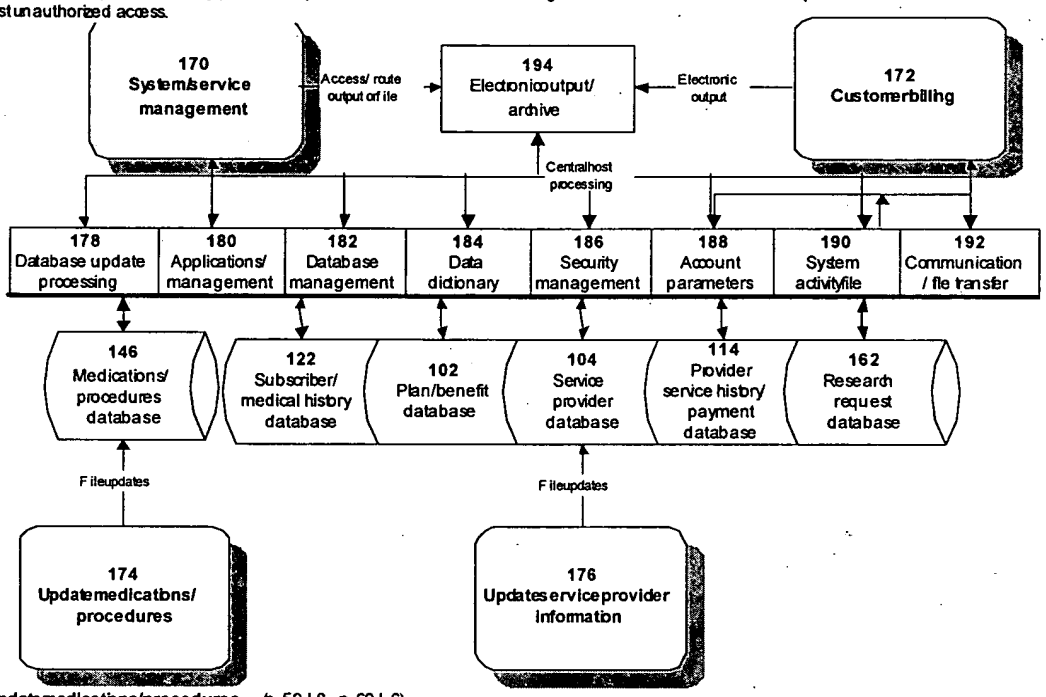
166 Communication link with statistical reporting
(p. 51 l. 30 - p. 52 l. 6)
-Query transmitted to research request database 162 using the query parameters to link keys within to the appropriate system databases.
-Response information returned electronically.
-Electronic information can be used for statistical and graphical analysis, for example, by loading into standard statistical software packages.

164 Standardized pre-selected reports
(p.54 l. 6 - 21)
-Provides integration of new subsciption search data with original baseline data for ongoing research.
-Query criteria or search frequency can be updated and electronically transmitted.
-Appends data returned from ongoing periodic searches of the system databases onto a previously collected database located on the researcher's computer.

Figure 9 with Descriptions from Patent Page/ Line References

170 System maintenance (p. 55 l. 6 -p.58 l. 16 and p. 47 l. 6 -p. 48 l. 10)
-Provides system control over processing functionality and service management support for system customers. The Shared Platform Services (178, 180, 182, 184, 186, 188, 190. 192) are used by all central host functions.
-Provides central setting of account parameters 188 to add new system accounts such as medical insurer, medical researchers, and service providers for inclusion in the system, to define billing, tiered pricing and account relationships for roll-up billing.
-Update record appended to original record. Problem tracking system accessible to all system users can be implemented under applications management 180. Full arbitration and dispute resolution support.
-System management functions include full data backup and restore and database update processing. Records can be stored indefinitely or for a specific period as defined for each field within each database via retention parameters within the data dictionary.
-Security parameters defining access groups and identifying data availability for these groups for each data field can be defined within security management platform services. -All shared platform security parameters provide an audit trail for monitoring against unauthorized access.

172 Customer billing (p. 58 l. 18 -p. 59 l. 6)
-Integrated billing for organizations defined in the service file. Organizations can define billing roll-up in accordance with cost accounting process. Parameters used during billing processing cycle.
-On billing processing dates the central billing application reads the activity file and account parameter records and produces an electronic invoice of costs per service categories and total service charges per billing entity.
-Electronic invoices are transmitted to customer through the communication/ file transfer 192 with a copy to the archive 194. Electronic transmission can accompany an electronic funds transfer from the customer to the system, also performed through the 192 communication platform service.



174 Update medications/procedures (p. 59 l. 8 -p. 60 l. 6)
-Provides entry and changes to standardized codes for all prognoses, treatments and medications.
-Designated organizations and agencies can update values to field categories within the data dictionary shared platform service and access the medications/ procedures database 146. Authorized agencies can review on-line, download or print any of the information.
-Updates can include the identification via new category codes, descriptions and codes identifying warning conditions or incompatibilities, for new diagnoses, procedures, pharmaceuticals, etc and can add informational records supporting any of these.
-Changes are accompanied by active dates with allow advance notification on developing procedures or for upcoming FDA approval. File is sent of host with implementation date/ time, whether and to whom automated notifications are to be generated, and whether other approval communications are needed prior to submitting the change to the data dictionary or the medications/ procedures database.

176 Update service provider information (p. 60 l. 8 -p. 61 l. 14)
-Permits authorized organizations to create, update and delete information stored in the service provider database 104. Includes records for licensed practitioners, organizations and organizational ownership. Service provider records can also be updated to reflect continuing education classes attended by, and disciplinary action taken against a service provider.
-Changes are accompanied by active dates which allow advance notification on organizational ownership petitions as an example. Batched update features and copy capabilities available to simplify changes to records.
-Extensible to allow secure access to social security, annuity and retirement account and benefit information.

Ertel

Ertel's "Patient Data Quality Review Method and System" is only that, a system for reviewing diagnosis related groups (DRGs) for accuracy prior to receiving payment from the insurer. DRGs are defined by Medicare and other payers who have converted their reimbursement mechanism to the "prospective payment system." Ertel's system uses DRG groupers that are either commercially obtainable or are available as public domain documents or software and loads them into the "Grouper" programs files and tables (block 20) of his system diagram. In addition, Ertel's system requires loading of batch or individually entered patient data into block 12. He lists the fields that are loaded, but his system does not create the patient record. It only performs a batch analysis on the patient data according to

Reviewing Ertel's system against Johnson's context diagram above, the only entity relationship that is in common is "60 Medical Research – (16) Medicare peer review organizations."

Edelson/Mayaud

Edelson/Mayaud's "Prescription Creation System" consists of a user interface with selection menus for the purpose of prescription writing only.

Cummings

Cummings attempted to solve a different problem than did Johnson. In his 'Background of the Invention', Cummings specifically states the purpose and use of his proposed system in his discussion of other patents: "they have not integrated important elements of total health care such as comprehensive preventive health measures, the review of the necessity for implementing selected procedures including changes in life styles, the obtaining of second opinions (i.e., utilization review/case management) and other functions contemplated by total health management as ancillary services. Neither have they included integration of the active participation by a patient's employer or inclusion of a patient's own cash balances." As is evident from this paragraph, the purpose of Cummings' invention is focused on the process at the physician office and does not address the full health-care value chain as does Johnson's invention.

In Cummings' description of the drawings, it becomes evident that he is defining a procedure for a physicians' office during a health care episode, rather than defining a health care infrastructure, which is Johnson's invention. His figures 5-11 are step-by-step procedures which do not show how any system processing would be accomplished. His figures 1 and 3, although they refer to "processing system" have not defined anything that could be used for the development of a system. The files he notes in figure 1 have no definitions, no databases nor keys by which data could be retrieved, and no processes for the creation, update and management of any data. Through his description, there are only vague references to the files with conflicting comments on what would be contained in them. It is through this conflict of content, in conjunction with his comment on page 7, lines 5-7 that it becomes apparent what he means by the term "file". In his reference to Physician File 44: "each individual physician may tailor a portion of his file to include additional items which reflect his own style and preferences." In another comment, on 9, lines 34-38, he states: "Also accessed are the participant's (patient's) charts and historical records. This is indicated by rectangle 105. As mentioned above, patient's medical charts and records are preferably stored in the physician's files 44." This shows that his definition of file is not a structured datastore, but is instead an unstructured file which would operate as a note file. How would anyone find anything? It's like saying that you would write something on paper and put it into a warehouse with no filing and retrieval method. Under the Cummings plan, either anyone who could log onto his generic "processing system 10" could access anything or a processing

system is only for a single physician, because there is no method defined which could enable multiple caregivers to have access to centralized patient records and have those records both secure and identifiable. There are no formats or procedures nor any structure or access for anything in figures 1 or 3 and there are no definitions of entities or of any functions for these entities. There are only boxes labeled "insurance companies 24", "banks 27" and "employer 28" and some kind of magical and unidentified interaction between them. Within the Cummings proposal the claimed features are lacking. Major modifications would be necessary to create a system which would support the functionality Cummings would need for his physician procedure, which as discussed before, is really what he is patenting. In addition, even with the claims he is making (which are not operable according to his art) there is no comparison with the features in Johnson's system. Cummings could access Johnson's infrastructure to make his interface operable, but his patent is not operable on its own.

Pitroda

In Pitroda's "Universal Electronic Transaction Card" Pitroda is defining a single card which would be used by multiple entities. His card uses touch sensitivity to select the account. In his background, Pitroda states, "The UET card of the present invention is capable of functioning as a number of different credit cards or other transaction or identification cards, which provides the user of the UET card with the capability of selecting one of many such cards for use in a particular transaction." What does it matter what he says the card is useful for; a card is not magic. It only operates as part of a processing infrastructure. The card itself is not a processor, but is a storage device. His statement in 2, lines 62-66 disclose this misunderstanding of component capabilities: "The UET card is also capable of processing transactional information and communicating with central processing units or computers operated by the providers of services, such as credit card institutions, banks, health care providers, retailers, wholesalers or other providers of goods or services." What Pitroda has patented is just one of many available devices which could be contracted for use for Johnson's invention, just as one could contract for any one of available central host processors or terminals or card readers. These hardware components are simply elements which can be deployed within the architecture (just as a number of companies can make a bolt which can be used in a car). The ICC or personal information device identified in Johnson's patent could be implemented with Gemplus, Schlumberger, Motorola, 3M or any other available technologies. Pitroda's patent, as defined, is non-functional technology. His basic product premise alone would not be workable given the processing security requirements and current operating regulations of the major credit card associations (something that Johnson knows very well through years of consulting and design work), namely the credit card associations require cards to carry their service marks as well as specified security, and this is unlikely to change anytime soon. Again, Pitroda's invention could be enabled to work in conjunction with Johnson's architectural infrastructure, but it could not operate alone; and Johnson's invention has nothing to do with his as Johnson's defines an application which would use available hardware components and is not attempting to patent the ICC card/ information device or any other hardware but is deploying it along with other components in the architectural application infrastructure, which Johnson's invention is patenting.

If Cummings and Pitroda's prior art is combined along with Ertel and Edelson, unlike the examiner's contention of the "obviousness" of Johnson's patent, the result as noted above for each of the examiner's references shows that the combined result would be inoperative.